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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,136	09/10/2003	David Brigham	FMC 1654 PUS (81095611)	2135
28395	7590	10/05/2004	EXAMINER	
BROOKS KUSHMAN P.C./FGTL 1000 TOWN CENTER 22ND FLOOR SOUTHFIELD, MI 48075-1238			ZANELLI, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/605,136

Applicant(s)

BRIGHAM ET AL.

Examiner

Michael J. Zanelli

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-20 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The application filed 9/10/03 has been examined. Claims 1-20 are pending.
2. The drawings are objected to because the blocks shown in Fig. 1 must be labeled with suitable legends.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Claims 7 and 8 are objected to because of the following informalities:
  - A. As per claim 7, at line 3 insert --pedal-- after "gas".
  - B. All claims depending from an objected base claim are also objected to as containing the same deficiencies.

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4. Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As per claim 6, “the first threshold value” (lines 4, 5, 10, 13) and “the second threshold value” (line 7) lack antecedence.

B. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Nagano et al. (6,059,064).

A. As per claim 1, Nagano discloses controlling a power source of a hybrid vehicle (Figs. 1,2) which includes the steps of determining vehicle speed (col. 5, lines 13-14), determining an operating state of the brake system (col. 5, lines 25-26), and activating a first power source based on the vehicle speed and operating state of the brake system (col. 5, lines 53-55).

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7. Claims 1, 2, 4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tamai et al. (6,307,277).

A. As per claim 1, Tamai discloses controlling a power source of a hybrid vehicle (Fig. 1) which includes the steps of determining vehicle speed, determining an operating state of the brake system, and activating a first power source based on the vehicle speed and operating state of the brake system (col. 3, lines 48-51).

B. As per claims 2 and 4, as above wherein the first power source is an engine (12) and the second power source is a battery (24,26,28).

C. As per claims 6 and 7, as above wherein it is at least determined whether a brake is released at lower speed range (col. 3, lines 48-51), whether additional power is demanded by operation of an accelerator pedal (col. 12, lines 31-34) thereby initiating activation of the first power source (i.e., engine), and deactivation of the first power source if additional power is not demanded (col. 3, lines 58-61; col. 12, lines 26-30).

8. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwasaki (6,701,229).

A. As per claim 1, Iwasaki discloses controlling a power source of a hybrid vehicle (Figs. 1) which includes the steps of determining vehicle speed (col. 3, line 31), determining an operating state of the brake system (col. 3, lines 42-43), and activating a first power source based on the vehicle speed and operating state of the brake system (col. 3, lines 59-61).

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B. As per claims 2-4, as above wherein the first source may be a fuel cell (col. 3, lines 59-61) or alternatively, an engine (col. 7, lines 46-50) and the second source may be a battery (Fig. 1:112).

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamai in view of Palanisamy (6,518,732).

A. As per claims 3 and 5, Tamai is applied as above whereby the first power source is an engine and the second power source is a battery. The claimed invention differs in that the first power source is a fuel cell and the second power source is a capacitor.

B. At the time of applicant's invention it was well-known in the hybrid vehicle art to use various power generating/storing sources in combination. For example, Palanisamy discusses various power sources including fuel cells and capacitors. One of ordinary skill in the art would have found it obvious to substitute one known power source for another as was well-known in the hybrid vehicle art.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasaki in view of Palanisamy.

A. As per claim 5, Iwasaki is applied as above whereby the second power source is a battery. The claimed invention differs in that the second power source is a capacitor.

B. At the time of applicant's invention it was well-known in the hybrid vehicle art to use various power generating/storing sources in combination. For example, Palanisamy discusses various power sources including capacitors. One of ordinary skill in the art would have found it obvious to substitute one known power source for another as was well-known in the hybrid vehicle art.

13. Claims 9-20 are allowed. As per claims 9 and 16, the prior art of record does not show or reasonably suggest, in combination with the other claimed subject matter, including determining whether a third threshold value has been exceeded and deciding whether to activate or stop an engine based vehicle speed, brake engagement and the third threshold value, as claimed. Dependent claims 10-15 and 17-20 are distinguishable for at least the same reasons.

14. Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations

of the base claim and any intervening claims. As per claim 8, the prior art of record does not show or reasonably suggest, in combination with the other claimed subject matter, including determining a target torque value and a target power value and using these parameters in determining the demand for additional power, as claimed.


15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (703) 305-9756. The examiner can normally be reached on Monday-Thursday 5:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/mjz

  
MICHAEL J. ZANELLI  
PRIMARY EXAMINER